ABSTRACT

An improved method for transmitting a signal from a wireless base station applies digital path gain to the signal before input to the digital-to-analog converter. Thereafter, using any known method for reducing the peak to average ratio the signal peaks are constrained by the maximum power that the transmitter can tolerate. This effectively increases the root mean square voltage of the signal while maintaining the peak voltage. As a result the peak to rms ratio is reduced. By reducing the peak to rms ratio at the digital end of the transmitter analog amplification headroom can be reduced, thus reducing cost and size of the radio and RF amplifier.